

3. Cross M5791 (97-7163) / accession 45-5

Analysis of 142 F<sub>2</sub>\* plants for  
linolenic acid content.

Range - 68.3 - 76.6%  
Number of plants over 70% - 131/142 (92%)

\* Generation with the greatest  
genetic variability

3. M5791 (97-7163) / U5-5.  
analysis of F2 plants

AGRICULTURE CANADA			MORDEN RESEARCH STATION					
98HL.XLS								
OILSEED QUALITY ANALYSIS								
SAMPLES ANALYSED: 98-GH10					DATE:	28-Jun	1999	
CONDITIONS: 97-7163/UGG 5-5			25 seed					
			High Linolenic					
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
1	FP 1001 25s 6/25		192.9	5.1	3.3	17.1	13.6	59.1
2	H.L. 1		212.3	3.9	1.7	16.0	7.5	70.9
3	2		211.3	3.9	1.8	17.0	6.2	71.1
4	3		214.2	3.5	1.5	16.2	6.5	72.2
5	4		222.0	3.8	1.4	11.4	6.9	76.5
6	5		216.7	3.9	1.7	13.2	7.9	73.3
7	6		216.5	3.8	1.9	13.6	6.9	73.7
8	7		210.9	3.3	1.8	17.5	7.5	69.9
9	8		216.6	3.8	1.8	13.6	7.3	73.5
10	9		210.9	3.8	1.5	17.9	5.8	70.9
11	10		210.6	3.8	1.7	17.4	6.8	70.3
12	11		215.1	3.8	1.6	14.8	7.2	72.5
13	12		216.4	3.8	1.5	14.4	7.0	73.4
14	13		216.0	3.8	1.6	14.2	7.6	72.8
15	14		214.7	3.6	1.7	14.8	8.0	71.9
16	15		218.1	4.4	1.8	11.1	8.8	73.9
17	16		213.0	4.0	1.8	15.5	7.2	71.6
18	17		217.2	3.7	1.5	13.5	7.8	73.4
19	18		212.7	3.5	1.6	16.3	7.8	70.7
20	FP 1001 6/25		196.3	5.2	3.4	17.4	13.9	60.1
21	19		214.0	3.5	1.6	15.1	8.8	71.0
22	20		212.4	4.3	1.7	15.4	7.3	71.3
23	21		216.7	3.8	1.4	14.3	7.2	73.3
24	22		215.5	3.6	1.9	14.5	7.1	72.9
25	23		217.3	3.8	1.7	13.7	6.8	74.1
26	24		216.6	3.4	1.7	14.3	7.5	73.1
27	25		213.3	3.9	1.5	16.2	6.6	71.8
28	26		215.8	3.6	1.6	15.3	6.0	73.5
29	27		216.9	3.7	1.6	13.8	7.3	73.5
30	28		216.7	3.5	1.5	14.5	7.1	73.4
31	29		207.0	3.7	1.7	19.8	6.5	68.3
32	30		217.9	3.4	1.7	13.5	7.6	73.8
33	31		0.0	Insuff.	seed			
34	32		218.6	3.5	1.6	13.8	6.3	74.9
35	33		220.2	3.4	1.5	12.8	6.9	75.4
36	34		213.9	3.6	2.0	14.9	7.6	71.8
37	35		212.1	3.5	1.5	17.2	6.9	70.9
38	36		215.8	4.0	1.8	14.2	6.5	73.5
39	37		213.7	3.8	1.7	15.5	7.2	71.8
40	FP 1001 6/25		196.5	5.2	3.4	17.3	13.8	60.3
41	38		216.3	3.8	1.7	14.1	7.2	73.3
42	39		218.2	4.1	1.9	12.0	7.4	74.6
43	40		217.2	3.9	1.9	12.4	8.3	73.4
44	41		219.9	4.3	1.6	10.8	7.9	75.3

AGRICULTURE CANADA			MORDEN RESEARCH STATION					
98HL.XLS								
			OILSEED QUALITY ANALYSIS					
SAMPLES ANALYSED: 98-GH10					DATE:	28-Jun	1999	
CONDITIONS: 97-7163/UGG 5-5			25 seed					
			High Linolenic					
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
45	42		215.2	4.0	1.4	14.5	7.7	72.4
46	43		212.0	3.8	1.6	16.4	7.7	70.6
47	44		214.0	4.0	1.8	15.1	6.8	72.3
48	45		215.4	3.7	1.6	14.5	7.8	72.4
49	FP 1001 25s 6/25		196.4	5.1	3.4	17.4	13.9	60.2
50	46		216.9	3.5	1.5	14.0	7.8	73.2
51	47		217.6	3.7	1.8	12.6	8.4	73.5
52	48		220.6	3.8	1.6	11.5	7.5	75.6
53	49		213.1	3.9	1.6	15.1	8.6	70.8
54	50		210.6	3.5	1.8	17.6	6.9	70.1
55	51		216.3	3.8	1.7	14.1	7.1	73.4
56	52		217.9	4.1	1.9	11.3	9.1	73.6
57	53		218.6	3.9	1.8	12.9	6.1	75.3
58	54		208.3	3.5	1.7	19.2	6.7	68.9
59	55		219.7	3.9	1.7	11.7	7.3	75.3
60	56		215.4	3.8	1.7	14.2	7.8	72.5
61	57		213.7	3.5	1.7	15.9	7.0	71.9
62	58		218.0	3.5	1.7	14.0	6.4	74.5
63	59		212.5	3.8	2.0	15.8	6.9	71.5
64	60		215.5	4.3	1.8	13.0	8.6	72.4
65	61		216.7	3.4	1.5	14.1	8.3	72.7
66	62		218.4	3.7	1.8	13.1	6.9	74.6
67	63		215.0	3.8	1.8	13.0	10.3	71.1
68	FP 1001 6/25		196.2	5.2	3.4	17.3	13.9	60.1
69	64		215.8	3.6	1.7	14.4	7.6	72.8
70	65		208.5	3.9	1.7	18.8	6.3	69.4
71	66		219.8	3.8	1.5	12.2	7.4	75.1
72	67		210.8	3.4	1.6	17.7	7.2	70.0
73	68		214.6	3.8	1.6	15.5	6.2	72.8
74	69		216.9	3.5	1.5	14.6	6.9	73.6
75	70		218.1	3.8	1.7	13.0	7.1	74.4
76	71		218.6	3.4	1.6	12.5	9.0	73.5
77	72		216.4	3.7	1.7	14.2	6.6	73.7
78	73		213.8	3.8	2.1	14.0	8.8	71.3
79	74		217.0	3.9	1.8	12.9	8.2	73.3
80	75		212.8	3.8	2.0	15.3	7.9	71.1
81	76		214.0	3.4	1.6	16.3	6.7	72.0
82	77		215.2	3.8	1.9	14.4	7.1	72.8
83	78		217.5	4.0	1.6	13.4	6.4	74.5
84	79		217.5	3.7	1.6	13.7	6.7	74.2
85	80		216.3	3.9	1.6	14.2	6.8	73.5
86	81		215.6	3.3	1.6	15.7	6.4	73.0
87	82		217.3	4.0	1.5	13.3	7.1	74.0
88	FP 1001 6/25		196.4	5.1	3.5	17.4	13.8	60.2

check

check

check

AGRICULTURE CANADA			MORDEN RESEARCH STATION					
98HL.XLS								
			OILSEED QUALITY ANALYSIS					
SAMPLES ANALYSED: 98-GH10					DATE:	28-Jun	1999	
CONDITIONS: 97-7163/UGG 5-5			25 seed					
			High Linolenic					
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
89	83		221.6	4.0	1.6	10.8	6.9	76.6
90	84		209.8	4.0	1.7	16.9	8.0	69.4
91	85		209.9	3.9	1.4	17.8	7.1	69.7
92	86		214.5	3.8	1.7	15.3	6.9	72.4
93	87		219.7	4.3	1.9	10.4	8.4	75.0
94	88		217.0	3.6	1.7	13.6	8.0	73.2
95	89		218.2	4.1	1.5	12.0	8.5	73.8
96	90		215.7	4.0	1.7	13.9	7.5	72.9
97	FP 1001 25s 6/25		196.4	5.2	3.4	17.3	13.9	60.2
98	91		216.4	3.8	1.4	15.1	5.9	73.9
99	92		217.0	3.9	2.0	12.5	8.0	73.6
100	93		213.4	4.0	2.3	13.7	8.7	71.3
101	94		213.1	3.5	1.8	15.6	8.2	70.9
102	95		217.4	3.8	1.6	13.4	7.3	73.8
103	96		218.4	3.7	1.6	13.4	6.5	74.8
104	97		209.9	3.7	1.6	18.5	6.0	70.2
105	98		213.3	3.7	1.9	15.6	7.3	71.6
106	99		219.4	3.8	1.6	12.5	7.0	75.1
107	100		215.8	4.0	1.8	13.7	7.8	72.8
108	101		217.3	3.6	1.6	12.9	9.2	72.8
109	102		214.6	3.7	1.5	15.5	7.1	72.3
110	103		213.7	3.9	1.8	14.8	8.1	71.5
111	104		218.8	3.8	1.6	13.1	6.2	75.2
112	105		218.5	4.1	1.9	11.6	8.1	74.3
113	106		211.3	3.5	1.6	17.7	6.6	70.6
114	107		210.8	3.7	1.8	17.7	6.4	70.5
115	108		217.0	3.8	1.6	14.3	6.2	74.1
116	FP 1001 6/25		196.4	5.1	3.5	17.3	14.1	60.0
117	109		213.8	3.9	1.7	14.8	7.9	71.7
118	110		217.5	3.4	1.6	13.4	8.4	73.1
119	111		217.5	3.8	1.9	12.9	7.5	74.0
120	112		217.4	3.6	1.7	13.7	7.2	73.8
121	113		220.0	3.8	1.7	11.6	7.6	75.3
122	114		219.9	3.5	1.5	13.1	6.6	75.4
123	115		216.1	3.8	1.6	14.7	6.3	73.6
124	116		215.0	3.7	1.6	15.6	6.1	73.0
125	117		211.6	4.1	1.8	16.3	6.8	71.0
126	118		206.3	3.7	1.5	21.3	4.9	68.6
127	119		216.3	3.8	1.8	14.0	6.8	73.6
128	120		210.4	4.1	1.8	16.6	7.6	69.9
129	121		213.7	3.9	2.1	15.2	6.4	72.5
130	122		206.9	3.6	1.8	20.1	6.0	68.5
131	123		215.1	3.6	1.6	15.3	6.7	72.7
132	124		213.8	4.5	1.8	14.0	7.8	72.0

check

check

AGRICULTURE CANADA				MORDEN RESEARCH STATION					
98HL.XLS									
		OILSEED QUALITY ANALYSIS							
SAMPLES ANALYSED:		98-GH10				DATE:	28-Jun	1999	
CONDITIONS:		97-7163/UGG 5-5			25 seed				
			High Linolenic						
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3	
133	125		215.5	4.1	1.6	14.0	7.5	72.8	
134	126		214.3	3.5	2.0	15.0	7.6	72.0	
135	127		219.8	4.0	1.8	11.0	8.3	74.9	
136	FP 1001 6/25		196.6	5.2	3.4	17.3	13.8	60.3	
137	128		209.9	4.0	1.6	18.3	5.6	70.5	
138	129		208.3	3.7	1.7	19.0	6.6	69.0	
139	130		217.4	3.7	1.9	13.3	7.0	74.1	
140	131		218.3	3.8	1.8	12.4	7.8	74.2	
141	132		208.9	3.8	1.8	17.7	7.9	68.8	
142	133		211.8	3.8	1.6	17.1	6.2	71.2	
143	134		208.9	4.0	2.4	16.4	8.2	69.1	
144	135		213.7	3.4	1.5	16.6	6.6	71.9	
145	FP 1001 6/25		196.5	5.1	3.4	17.4	13.9	60.2	
146	136		217.2	3.6	1.8	13.9	6.9	73.9	
147	137		217.1	3.8	1.6	13.8	6.9	73.9	
148	138		219.6	3.9	1.7	11.9	7.0	75.4	
149	139		217.2	3.6	1.8	14.6	5.5	74.6	
150	140		216.0	3.3	1.7	14.9	7.2	72.9	
151	141	15 seeds	214.2	3.4	1.5	16.2	6.9	72.0	
152	142		219.8	3.7	1.5	12.4	7.3	75.1	
153	143		217.1	3.9	1.6	13.3	7.7	73.5	
154	FP 1001 6/25		196.7	5.1	3.4	17.3	13.9	60.3	